

## ABSTRACT

Expandable sealant and baffle compositions and methods of forming and using such compositions are provided wherein the compositions comprise a first thermoplastic resin, an epoxy resin, preferably a second thermoplastic resin different from the first thermoplastic resin, and optionally a compound selected from the group consisting of pigments, blowing agents, catalysts, curing agents, reinforcing agents, and mixtures thereof. The resulting compositions are formed as self-sustaining bodies which can be heat-expanded into a lightweight, high strength product for sealing hollow structural members of vehicles, substantially decreasing the noise which travels along the length of those members as well as strengthening those members with minimal increases in their weights. In a preferred embodiment, the first thermoplastic resin is an SBS block co-polymer, the epoxy resin is a bisphenol A-based liquid epoxy resin, the second thermoplastic resin is a polystyrene, and the reinforcer is hydrated amorphous silica. The compositions can be formed into free-standing, self-sustaining parts or into U-shaped members supported on lattice-type nylon supports.